

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

Division of Tuberculosis Prevention and Control

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TWO-STEP SKIN TESTING: Nursing Home and Rest Home Residents

Rationale:

In most individuals, tuberculin skin test (TST) sensitivity persists for many years after infection. However, over time, the size of the TST reaction may decrease or disappear. If PPD is administered to infected individuals whose skin tests have waned, the reaction of the initial test may be small or absent; however, there may be a recall response on repeated testing. This is called the “booster effect” and can be misinterpreted as a skin test conversion.

Two-step skin testing is a technique used to prevent the “booster effect” from being interpreted as a TST conversion and to establish accurate baseline TST results for residents in nursing homes and rest homes. In the two-step method, persons who have a negative initial TST undergo a second TST 1-4 weeks after the first. The result from the second test should be considered the baseline result. Those individuals with a positive reaction on the second test should be considered to be previously positive, and those with a negative reaction on the second test should be considered uninfected. In those uninfected persons, a 10mm increase on any future TST should be interpreted as a skin test conversion. Repeated skin testing with PPD will not induce a positive skin test reaction in individuals who have no hypersensitivity to the antigens in PPD. That is, a repeat TST does not produce a false positive reaction.

Procedure:

1. Residents of nursing homes and rest homes, expected to stay in the facility for three months or longer, receive their first TST as soon as possible after admission, unless there is documentation of a previous positive reaction (10mm or greater).
 - Administer 5 tuberculin units of PPD intradermally.
 - Read in 48 to 72 hours.
 - Record on resident’s medical record
2. If the initial test is positive (10mm or greater), no further testing is required.
3. If the initial test is negative, repeat the TST in 1 – 4 weeks.
4. If the second test is positive, the resident has a “boosted” reaction and is considered to have a latent TB infection
5. Residents with positive reactions are referred for medical evaluation and chest x-ray. (See policy: Tuberculosis Testing and Treatment in Nursing Homes and Rest Homes)